

ABSTRACT OF THE DISCLOSURE

A switch device is provided with a MOSFET (field effect transistor) connected between an input and an output, an overcurrent detecting circuit for detecting the overcurrent when the current flowing in the MOSFET exceeds a predetermined value, and a gate controlling circuit for controlling an ON/OFF state of the MOSFET by controlling the gate voltage of the MOSFET. The gate controlling circuit changes the gate voltage such that ON resistance of the MOSFET is gradually decreased after it rises once when the MOSFET is changed from the OFF state to the ON state.